

CURRICULUM

EDUCATIONAL AND QUALIFICATION DEGREE: BACHELOR
 COURSE OF STUDY: ECOLOGY AND ENVIRONMENTAL PROTECTION
 VOCATIONAL FIELD: 4.4. EARTH SCIENCES

FORM OF STUDY: FULL TIME

DURATION OF STUDY: 4 YEARS

Duration of the semester: 14 weeks

Years	Semester	No.	Course unit code	Full name of the course unit (course projects, practical trainings)	Form of control	Teaching hours		Teaching hours per type of seminars			Overall teaching hours per	Credits according to ECTS	
						L	S	S	Lab	P			
FIRST	FIRST	1	121101	General Geology	E	2	2	x			56	7	
		2	291110	General and Inorganic Chemistry	E	3	3		x		84	7	
		3	361101	Mathematical Analysis – Part I	E	2	2	x			56	7	
		4	371101	Introduction to Computer Graphic Systems	CA	1	2			x	42	4	
		5	351112	Engineering graphics	CA	1	2			x	42	5	
		6	421100	<i>Foreign Language</i>	CA		3	x			42	2*	
		7	431143	Physical Education and Sports	CA		2			x	28	1*	
	Overall for the first semester:					3+4	9	16	7	3	6	350	30+3*
	SECOND	8	361102	Mathematical Analysis – Part II	E	2	2	x			56	8	
		9	181102	Physics – Part I	E	2	2			x	56	7	
		10	291102	Analytical Chemistry	E	2	3		x		70	8	
		11	281101	Mechanics	E	2	2			x	56	7	
		12	421100	<i>Foreign Language</i>	CA		3	x			42	2*	
		13	431143	Physical Education and Sports	CA		2			x	28	1*	
14		121126	<i>Summer Practices: General Geology – 6 days</i>							36	1*		
Overall for the second semester:					4+2	8	14	5	3	6	344	30+4	
Overall for the first year:					7+6	17	30	12	6	12	694	60+7	
SECOND	THIRD	15	181103	Physics – Part II	E	2	3			x	70	7	
		16	131103	Mineralogy and Petrography	E	3	3			x	84	6	
		17	291103	Physical chemistry	E	2	3		x		70	6	
		18	231109	Mining Technologies	E	2	2	x			56	5	
		19	171103	Fundamentals of Environmental Protection	E	3	3	x			84	6	
		20	291104	Organic Chemistry	E	3	3		x		84	8	
		21	411300	Humanities, Social and Legal Sciences (Optional course)	CA	2	2	x			56	3*	
	22	431143	Physical Education and Sports	CA		2			x	28	1*		
	23	421100	<i>Foreign Language</i>	CA		3	x			42	2*		
	Overall for the third semester:					6+2	17	24	10	6	8	574	38+6
	FOURTH	24	171101	General and Geological Microbiology	E	3	3		x		84	8	
		25	291105	Hydrochemistry	E	2	2		x		56	7	
		26	241102	Mineral Technologies	E	2	2	x			56	7	
27		431143	Physical Education and Sports	CA		2			x	28	1*		
28		171137	<i>Summer Practice: Engineering Geoecology – 6 days</i>							36	1*		
29		131103	<i>Summer Practice: Mineralogy and Petrography – 6 days</i>							36	1*		
Overall for the fourth semester:					3+1	7	9	2	5	2	296	22+3	
Overall for the second year:					9+3	24	33	12	11	10	870	60+9	

Years	Semester	No.	Course unit code	Full name of the course unit (course projects, practical trainings)	Form of control	Teaching hours		Teaching hours per type of seminars			Overall teaching hours per semester	Credits according to ECTS	
						L	S	S	Lab	P			
THIRD	FIFTH	30	171102	Fundamentals of Ecology	E	3	3	x			84	8	
		31	111117	Geology and Exploration of mineral deposits	E	2	2	x			56	5	
		32	161127	Drilling and Oil and Gas Production	E	3	3	x			84	6	
		33	111141	Geochemistry	E	2	3	x			70	6	
		34	141115	Geophysical Methods in Geoecology	E	2	2	x			56	5	
	Overall for the fifth semester:					5	12	13	13		350	30	
	SIXTH	35	171105	Solid wastes treatment technologies	E	3	3	x			84	8	
		36	151112	Engineering Geology and Hydrogeology	E	3	3			x	84	7	
		37	171104	Water protection and wastewaters treatment	E	3	3			x	84	8	
		38	171106	Soil Science	E	3	3	x			84	7	
		39	171138	Summer Practice: Deposition and Treatment of Solid Wastes – 5 days							30	1*	
		40	171139	Summer Practice: Water protection and wastewaters treatment – 6 days							36	1*	
	41	141115	Summer Practice: Geophysical Methods in Geoecology – 5 days							30	1*		
	Overall for the sixth semester:					4	12	12	6		432	30+3*	
	Overall for the third year:					9	24	25	19		6	782	60+3*
	FOURTH	SEVENTH	42	171107	Biotechnological methods in geoecology	E	3	3		x		84	7
			43	171113	Landscape science and ecology of settled areas	E	2	2			x	56	5
44			171109	Processes and Equipments in geoecology	E	3	3	x			84	6	
45			171110	Air protection and purification	E	3	3	x			84	6	
46			171108	Land Reclamation	E	3	3	x			84	6	
Overall for the seventh semester:					5	14	14	9	3	2	392	30	
EIGHT		47	171112	Environmental impact assessment	E	3	3	x			60	6	
		48	171111	Environmental monitoring	E	3	3	x			60	6	
		49	271119	Economics and Management at the Environment	E	2	2	x			40	4	
		50	171174	Legal and organizational aspects of environmental protection	E	2	2	x			40	4	
Overall for the eighth semester:					4	10	10	10			200	20	
STATE EXAM											10		
Overall for the fourth year:					9	24	24	19		2	592	60	
OVERALL FOR THE FULL COURSE OF STUDY::					34+9	89	112	62	20	30	2938	240+19*	

PARAMETERS OF THE CURRICULUM

Overall teaching hours: 2938, distributed as follows: Lectures 1206 teaching hours.

Seminars 1528 teaching hours, including:

- seminars - 740
- laboratory - 280
- practical - 508

Practice – 204 teaching hours, including:

- educational - 204

The credits above 240 are formed by the disciplines "Foreign language", Physical education and sports", "Humanities, Social and Legal Sciences" and partially by the practices, marked with asterisk. The eighth semester is of 10 weeks duration. The other semesters are of 14-weeks duration.

Abbreviations: E – exam; CA - continuous assessment; L - lectures; S - seminars; Lab - laboratory seminars; P - practical seminars; CP – course project; CW – course work.